AMENDMENT TO THE SPECIFICATION

Consistent with the filed replacement drawings, Applicants submit the following replacement paragraphs for page ~~9~~ 8, lines ~~14-16~~ 22-24: KG

[0025] Fig. 5 is a bar graph comparing the total impulse (psig * sec @ 300 milliseconds (m·s)) of the billets of Example 1 ~~(labeled YKT-9)~~ to Comparative Example A; and

Consistent with the filed replacement drawings, Applicants submit the following replacement paragraphs for page 9, lines ~~17-18~~ 13:

KG

[0026] Fig. 6 is a bar graph comparing the total impulse (psig * sec @ 300 milliseconds (m·s)) of the billets of Example 2 ~~(labeled YKT-21 MOD)~~ to Comparative Example A.

Consistent with the filed replacement drawings, and to correct an inadvertent typographical error, Applicants submit the following replacement paragraph for page 21, line ~~19~~ 3 through page 21 ~~22~~, line 15 ~~9~~:

[0048] The thermobaric explosives of the present invention may serve as part of an article of manufacture, such as a weapon or projectile. For example, Fig. 3 illustrates a projectile, such as a shoulder-launched projectile, generally designated by reference numeral 50. The projectile 50 comprises a warhead casing 52 loaded with a thermobaric explosive, a fuse 56, a motor case 58 loaded with a propellant charge 60, an end closure 62 for attaching the motor case 58 to the warhead case ~~54~~ 52, and an aft nozzle assembly 64 (the left side shown in section) comprising an igniter 66 and a plurality of fins 68. Embodiments of the thermobaric explosive of the present invention may be loaded in the warhead casing 52. According to another embodiment of the invention, the thermobaric explosive may form the explosive charge of a hand grenade 70, such as shown in Fig. 4. The hand grenade comprises a booster 72 and explosive charge 74.

Consistent with the filed replacement drawings, and to correct an inadvertent typographical error, Applicants submit the following replacement paragraph for page 24, line ~~19~~ 1 through page ~~25~~ 24, line ~~18~~ 18:

[0054] The dried, coated HMX particles were then blended with the 5-micron aluminum powder in a rotating conical mixer or wye blender. The blended molding powder was consolidated in an apparatus similar to that shown in Fig. 3 between Nylatron capture discs to provide a billet. Fig. 5 is a bar graph comparing the total impulse (psig * sec @ 300 m·s) of the billets of Example 1 ~~(labeled YKT-9)~~ to a Comparative Example A.

Example 2:

TABLE 2

Ingredient		Weight Percent
(a) Magnalium (1:1 Mg/Al, 15 microns)		35.0
(b) Filler M		
	35.0	
	(i) Magnalium (1:1)	73.0 wt%
	(ii) Comp D2 wax	23.5 wt%
	(iii) Wood Rosin	3.5 wt%
(c) ~~PBXW-11~~ PBX		30.0
	(i) HMX	96.0 wt%
	(ii) Polyacrylate elastomer	1.0 wt%
	(iii) Dioctyl adipate	3.0 wt%

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Consistent with the filed replacement drawings, and to correct an inadvertent typographical error, Applicants submit the following replacement paragraph for page ~~26~~ 25, lines ~~3~~ 6 - ~~11~~ 13:

[0056] ~~PBXW-11~~ PBX was prepared in the same manner described above in Example 1 with respect to coating of the HMX particles. The magnalium powder (15 microns) was then blended with the PBX and Filler M in a rotating conical mixer (or wye blender). The blended molding powder was consolidated in an apparatus similar to that shown in Fig. 3 between Nylatron capture discs to provide a billet. Fig. 6 is a bar graph comparing the total impulse (psig * sec @ 300 m·s) of the billets of Example 2 ~~(labeled YKT-21 MOD)~~ to Comparative Example A Comparative Example A

AMENDMENT TO THE SPECIFICATION

Consistent with the filed replacement drawings, and to correct an inadvertent typographical error, Applicants submit the following replacement paragraph for page ~~26~~ 25, line ~~12~~ 15 through page ~~27~~ 26, line ~~3~~ 6:

[0057] Comparative Example A comprises a castable composition ~~known as PBXIH-135~~. This composition comprises a thermosetting polyurethane containing a weight ratio of HMX to Al of 45:35. The nominal formulation is set forth below in Table 3:

TABLE 3

Ingredient	Weight Percent
Hydroxy-Terminated Polybutadiene (HTPB)	9.335
Isodecyl Pelargonate (IDP)	9.335
Lecithin (L)	0.36
Ethanox-702 antioxidant (AO)	0.05
Triphenyl Bismuth (TPB)	0.03
Isophorone diisocyanate (IPDI)	0.89
Aluminum (Al)	35.00
HMX	45.00

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Consistent with the filed replacement drawings, and to correct an inadvertent typographical error, Applicants submit the following replacement paragraph for page ~~27~~ 26, lines ~~11-14~~ 14 17:

[0059] A comparison of Examples 1 and 2 against Comparative Example A demonstrates that the inventive compositions exceed the performance of conventional thermobaric explosives ~~**PBXIH-135**~~, in some cases by as much as 30% ~~in~~ of the total impulse ~~result~~ (psig * sec @ 300 ms).